

# APPLICATION FOR UNITED STATES LETTERS PATENT

**Title:** PORTABLE VEHICLE CANOPY

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## PORTABLE VEHICLE CANOPY

### Field of the Invention:

The current invention relates to canopies and, more particularly, the protection from the sun's ultraviolet rays for the riding lawn mower operator.

### BACKGROUND OF THE INVENTION

The operator of a riding lawn mower has little to none protection from the sun's ray and the heat. With any outdoor vehicle, protection from the sun's ultraviolet rays has always been a challenge.

Vehicle shade canopies have been designed and produced but most are overcomplicated resulting in poor functionality. Other canopy designs are hard to assemble, require tools, modification for the mower itself, and do not provide for easy access for the operator to get in the seat, for example, in United States Patent Number 6,059,351.

Some mower canopy designs use the the implement hitch on the mower so it cannot be used while the canopy is installed on the mower, see United States Patent Number 5, 232,005.

Model specific mower canopies are available but, will only work on the the specified mower model. Mower canopies are available but require tools to attach and modification to your riding lawn mower. Most people are not willing to drill holes in the fenders and hood of their riding lawn mower to mount a canopy. Also, current canopies are not easily or quickly removable for storage or while mowing under low hanging limbs.

It is therefore an object of the invention to allow the average person to assemble and disassemble the canopy unit without the use of tools.

It is another object of the invention to quickly and easily removed from the riding lawn mower for mowing under low hanging tree limbs.

It is an object of the invention to easily removed and disassembled for storage.

It is a further object of the invention to adapt to virtually any riding lawn mower produced since the year 1980.

It is another object of the invention to be assembled to most lawn mower vehicles in minutes without any modification or drilling of holes in vehicle for mounting.

It is still another object of the invention to be attached using suction cups and plastic hooks so that no scratches or marking will occur to the riding lawn mower while attached to vehicle.

#### SUMMARY OF THE INVENTION

In accordance with the present invention, there is provided a portable vehicle canopy that is both functional and stylish. A curved tubular frame work supports a nylon shade material. Hold down straps use common hardware for attachment to riding lawn mower.

## BRIEF DESCRIPTION OF THE DRAWINGS

A complete understanding of the present invention may be obtained by reference to the accompanying drawings, when considered in conjunction with the subsequent, detailed description, in which:

Figure 1 is a perspective view of an overall assembly view of the portable vehicle canopy in accordance with the invention;

Figure 2 is a perspective view of a detail view of the suction cup mounting feature shown in Figure 1; and

Figure 3 is a perspective view of an exploded view of the portable vehicle canopy.

For purposes of clarity and brevity, like elements and components will bear the same designations and numbering throughout the FIGURES.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

Figure 1 is a perspective view of a Portable Vehicle Canopy mounted on a typical Riding Lawn Mower 1. The portable vehicle canopy apparatus is provided for a Riding Lawn Mower 1 (vehicle). A pair of Suction Cup 2 attaches to the painted fender surface of Riding Lawn Mower 1 (vehicle). Two Bushing 4 are mounted into the pair of Suction Cup 2 to provide pivotal motion of the canopy framework. Each Eye End 5 is fastened to Bushing 4 by means of Shoulder Screw 3. The Eye End 5 is mounted non-removable to the Upright Tube 6. Two Upright Tube 6 are included in the assembly. The Upright Tube 6 connects to the Top Tube 7 by means of the Tube Coupling 12 and the Spring Clip Fastener 19. Two Top Tube 7 are included in the assembly. Each Top Tube 7 connects to the Front Tube 8 by means of the Tube Coupling 12 and the Spring Clip Fastener 19. The T-Bracket 16 and Spring Clip Fastener 19 mounts the Back Tube 17 across to the two Top Tube 7 setting the width and providing a structural cross member to the tubing framework. The Nylon Shade Material 18 is attached to itself by the means of

Velcro wrapped around Front Tube 8 and Top Tube 7. Two Front Strap 14 and two Rear Strap 15 assemblies are used to hold the tubing framework upright and are permanently fastened to Upright Tube 6 and Front Tube 8. The Snap Hook 10 and Suction Cup 2 allows the canopy to be mounted universally to any Riding Lawn Mower 1. The Hook Retainer 11 attaches the Front Strap 14 or Rear Strap 15 to the Snap Hook 10. The Strap Adjuster 9 allows the length of the Front Strap 14 or Rear Strap 15 to be adjusted and the slack to be removed holding the tubing framework rigidly upright.

Figure 2 is a perspective detail view of the Suction Cup 2 and Bushing 4 non-fastener mounting to the Riding Lawn Mower 1.

Figure 3 is a exploded of the tubing framework assembly. This drawing shows the separation points of the canopy framework assembly. The person assembling or disassembling the canopy assembly would accomplish the task in this manor.

Since other modifications and changes varied to fit particular operating requirements and environments will be apparent to those skilled in the art, the invention is not considered limited to the example chosen for purposes of disclosure, and covers all changes and modifications which do not constitute departures from the true spirit and scope of this invention.

Having thus described the invention, what is desired to be protected by Letters Patent is presented in the subsequently appended claims.